AI Data Validator with Human IN Loop

HACKATHON 2024
23.11.-24.22.2024, KOSICE, SLOVAKIA

Mentors:
Kristian Sopkovic
Vladimir Banoci
Maros Skyslak

Deutsche Telekom IT Solutions Slovakia

HACKATHON 2024 PROBLEM STATEMENT

Large amounts **DATA** following standards

Wrongly filled documents

Inconsistency in DATA

HACKATHON 2024 SOLUTION

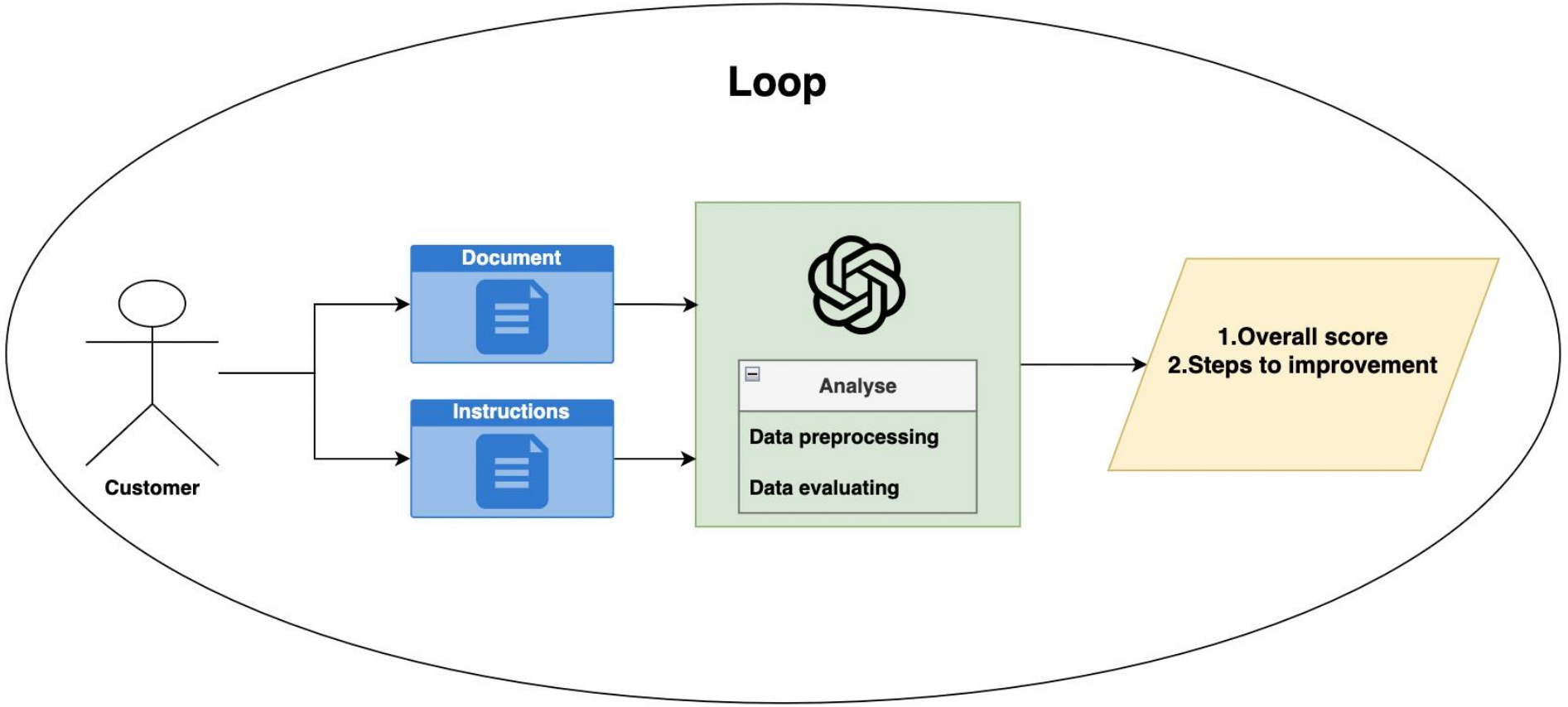
Build a system that **enhance** document Quality with **AI-Assisted Validation** and Human Collaboration

HACKATHON 2024 EXAMPLES OF USAGE

AI VALIDATOR FOR:

- ❑ filling the Grants
- ❑ filling documents for Building permissions
- ❑ processing Employment Contracts
- ❑ patent Filling
- ❑ IT Change Management Requests

Human generated picture ☺



MENTORS

Deutsche Telekom IT
Solutions Slovakia

Ing. Maros Skyslak
Product Manager DTIT

Ing. Kristian Sopkovic
Data Scientist DTIT

Phd., Ing. Vladimir Banoci
AI Architect DTIT

Title:	**LLM Document Validator with Human-in-the-Loop**
Description:	**Enhancing Document Quality with AI-Assisted Validation and Human Collaboration**
Problem Statement:	Organizations often manage large amounts of internal documents that must align with specific standards and maintain accuracy and relevance. This use case focuses on creating an application to ensure documents are filled correctly and consistently by leveraging historical data and LLM technology. The solution will integrate human feedback to validate the quality of the documents and provide a baseline for improving future AI recommendations.
Outcome:	By the end of the hackathon, students will have developed prototypes that blend AI capabilities with human collaboration, creating a document validation and assistance system. These solutions could serve as a foundation for further academic projects or real-world applications.
Key Objectives:	Develop a prototype solution that uses an LLM-based assistant to: • Analyze and validate existing documents against organizational standards. • Recommend autofill suggestions for incomplete sections based on historical data. • Include a "Human-in-the-Loop" (HITL) process to evaluate and improve the AI's outputs.
Evaluation Criteria:	• **Innovation**: How creative is the proposed solution? • **Functionality**: Does the application perform as intended? • **User Experience**: Is the interface intuitive and easy to use? • **Impact**: How effectively does the solution solve the stated problem? • **Human-in-the-Loop Integration**: How seamlessly does the feedback mechanism work?
Prerequisites for Participants:	• Proficiency in programming, particularly in Python. • Familiarity with NLP, machine learning, and data scraping techniques. • Knowledge of web development (if creating a user interface). • Access to necessary tools and libraries. • Creative problem-solving skills.